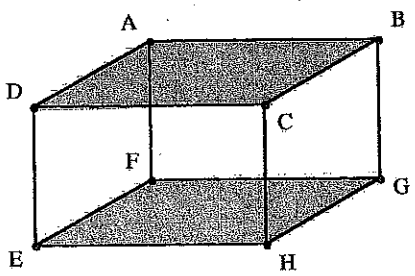
Honors Geometry
3.1-3.4

Name _____



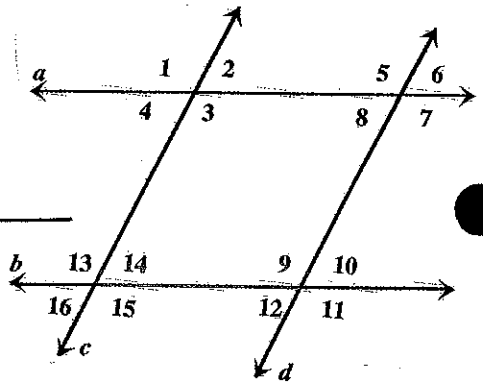
Refer to the above labeled figure.

1. Name all the planes parallel to plane ABC. _____

2. Name all segments that intersect $\overline{AB}$. _____

3. Name all segments parallel to $\overline{FG}$. _____

4. Name all segments that are skew to $\overline{EF}$. _____



5. If m<3 = m<7, then ____ || ____.
reason: _____

6. If m<14 = m<4, then ____ || ____.
reason: _____

7. If m<12 = m<6, then ____ || ____.
reason: _____

8. If m<15 + m<12 = 180°, then ____ || ____.
reason: _____

Given: Points W(-4, -3), X(-5, 8), Y(6, 9), and Z(7, -2).

9. The slope of $\overleftrightarrow{WX}$ is _____.

10. The slope of $\overleftrightarrow{YZ}$ is _____.

11. The slope of $\overleftrightarrow{XY}$ is _____.

12a) Do you think $\overleftrightarrow{WX}$ and $\overleftrightarrow{YZ}$ are parallel lines? _____

b) Describe lines XY and WX. _____

State whether the two lines are parallel, perpendicular or neither.

13. $y = 3x + 2;\ y = 3x + 5$

ans = _____

14. $y = -2x - 6;\ y = 2x + 6$

ans = _____

15. $y = 4x + 1;\ y = -\frac{1}{4}x + 4$

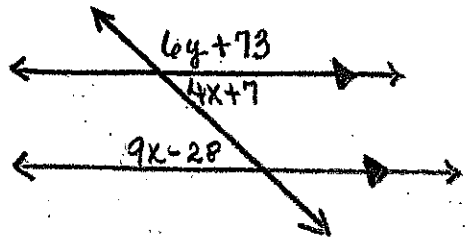
ans = _____

16. $y - 2x = 8;\ 2x - y = 4$

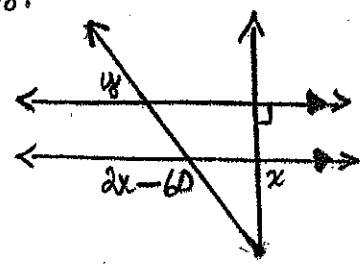
ans = _____

Find the value of x that will make the lines parallel.

17.



18.



19. Find the value of k so that the line passing through R (-3, k) and S (0,0) is perpendicular to the line passing through T (0,0) and U (7,7).

20. Solve the system

$$7y = x - 10$$
$$2y - 3x = 8$$